

PROPOSAL FORM
Mid-Michigan Drinking Water Consortium Bulk Chemicals

Note: This form may be completed using MS Word®

Provide the following business and contact information:

Legal Name: Key Chemical Inc		Federal ID or Social Security Number: 90-0053161
Address: 9503 Dovewood Place		State of Incorporation Delaware
City: Waxhaw	State & Zip: NC 28173	Primary E-Mail: bids@keychemicalinc.com
Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> LLC <input type="checkbox"/> LLP <input type="checkbox"/> Sole Proprietor <input type="checkbox"/> Partnership <input type="checkbox"/> S-Corporation <input type="checkbox"/> Other (Explain)		
Office Phone: 704-843-9873	Alternate Office Phone:	Office Fax: 704-973-9281
Primary Contact: Sara Cauthen	Contact Phone: 704-843-9873	Contact Fax: 704-973-9281
Contact Mobile: 803-577-8287	Contact E-Mail:	Website URL:

Provide responses to the following questions:

How many years has your firm been in business under the present ownership?	13 Years
Have you done business with the Board of Water and Light? If so, furnish specifics.	Yes, 2014 Joint Chemical Contract
Have you done business with the City of Lansing? If so, furnish specifics.	NO
Have you ever defaulted on a contract or been involved in litigation with the Board of Water and Light or the City of Lansing? If so, furnish specifics.	NO
Have you ever defaulted on a contract or been involved in litigation or pending litigation or claims with any other client in the past five years? If so, furnish specifics.	NO
List any relationships between your firm's staff and any current BWL employee.	N/A
Specify your background, training, experience, credentials and other factors which qualify you to perform the work described in the Scope of Work included in this Request for Proposal.	Please see attached company information
List at least three (3) references for similar work you have performed for other clients. Include Client name, contact name, title and phone number.	Please see attached list of references
List subcontractors that you plan to use on this project.	Only dedicated freight companies
Indicate any exceptions to the enclosed General Requirements.	N/A
Include any additional information you may deem helpful in evaluating your proposal.	N/A

SWORN AND NOTARIZED AFFIDAVIT OF COMPLIANCE

IRAN ECONOMIC SANCTIONS ACT

Michigan Public Act No. 517 of 2012

All bidders must submit the following certification statement in compliance with Public Act No. 517 of 2012 (the "Iran Economic Sanctions Act") and attach this form to the bid. **The Lansing Board of Water & Light shall not accept any bid that does not include this sworn and notarized certification of statement.**

The undersigned, the owner or authorized officer of Key Chemical Inc. (the Bidder), pursuant to the compliance certification requirement provided in the Lansing Board of Water & Light Request for Proposal, hereby certifies, represents and warrants that the Bidder (including its officers, directors and employees) is not an "Iran linked business" within the meaning of the Iran Economic Sanctions Act, and that in the event the Bidder is awarded a contract as a result of the aforementioned Request for Proposal, the Bidder will not become an "Iran linked business" at any time during the course of performing the work or any services under the contract.

The Bidder further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than \$250,000.00 or two (2) times the amount of the contract or proposed contract for which the false certification is made, whichever is greater, the cost of the Lansing Board of Water & Light's investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on a Request for Proposal for three (3) years from the date it is determined that the person has submitted the false certification.

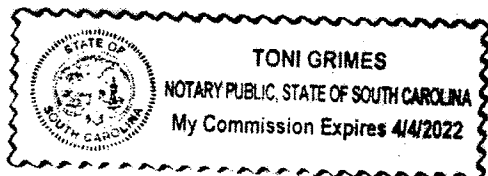
BIDDER

Key chemical Inc.
By: Sara Coeeth
Its: Bid Coordinator
Date: 3/16/15

STATE OF South Carolina

COUNTY OF York

This instrument was acknowledged before me on the 16th day of March 2015, by Toni Grimes



[Signature]
Notary Public
York County, SC
My Commission Expires: 4/4/2022
Acting in the County of: York

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The undersigned Bidder hereby acknowledges receipt of the following addenda:

Addendum No.	Date	Enter addenda numbers and received dates if applicable
1	3/3/15	
2	3/6/15	

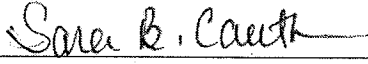
Provide pricing:

Activity	Unit Pricing
Pebble Quick Lime Chemical: Demurrage:	\$ <u> No Bid </u> / ton \$ <u> No Bid </u> / hour *first 4 hours free
Sodium Hypochlorite Chemical: Demurrage:	\$ <u> No Bid </u> / ton \$ <u> No Bid </u> / hour *first 4 hours free
Hydrofluosilic Acid Chemical in minimum 40,000 lbs. shipments: Chemical in minimum 30,000 lbs. shipments: Chemical split between Dye and Wise Plants minimum 40,000 lbs. shipments: Demurrage:	\$ <u>413.24</u> / ton \$ <u>428.14</u> / ton \$ <u>420.95</u> / ton \$ <u>60.00</u> / hour *first 4 hours free
Ferric Chloride Dry Chemical: Liquid Chemical: Demurrage:	\$ <u> No Bid </u> / ton \$ <u> No Bid </u> / ton \$ <u> No Bid </u> / hour *first 4 hours free

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The undersigned Bidder states that this proposal is made in conformity with the Proposal Documents and agrees that, in the event of any discrepancies or differences between any conditions of their proposal and the Proposal Documents, the provisions of the latter shall prevail. No verbal or written agreements or understandings considered or entered into prior to signing of a contract in the form of a purchase order, shall be binding after the signing of the contract unless incorporated in the contract.

The undersigned Bidder certifies that this proposal is made in good faith, without collusion or connection with any other person or persons submitting proposals for the work.

Company Name: Key Chemical Inc.
Signature: 
Name: Sara B Cauthen
Title: Bid Coordinator
Date: March 16, 2015

END OF PROPOSAL FORM



ADDENDUM ACKNOWLEDGEMENT

The undersigned Bidder acknowledges receipt of **Addendum No. 01**, dated 03/03/2015, to Request for Proposal for Mid-Michigan Drinking Water Consortium Bulk Chemicals, and certifies that it has considered same in formulating its proposal.

Name of Bidder: Key Chemical Inc.

Address of Bidder: 9503 Dovewood Place
Wayhew NC 28173

Acknowledged By: Sara Cauthen
Signature

Sara Cauthen
Name

Bid Coordinator
Title

March 16, 2015
Date



ADDENDUM ACKNOWLEDGEMENT

The undersigned Bidder acknowledges receipt of **Addendum No. 02**, dated 03/06/2015, to Request for Proposal for Mid-Michigan Drinking Water Consortium Bulk Chemicals, and certifies that it has considered same in formulating its proposal.

Name of Bidder:

Key Chemical Inc.

Address of Bidder:

9503 Dorewood Place
Wayhawn NC 28173

Acknowledged By:

Sara Cauthen
Signature

Sara Cauthen
Name

Bid Coordinator
Title

March 16, 2015
Date



QUALITY • SERVICE • COMMITMENT

9503 Dovewood Place • Waxhaw, NC 28173
Phone: (704) 843-9873 • Fax: (704) 973-9281

Hydrofluorosilicic Acid 23%

Affidavit of Compliance with NSF / AWWA Current Standard

To Whom It May Concern:

This letter certifies that the Hydrofluorosilicic Acid furnished by Key Chemical will meet or exceed all of your required specifications (AWWA B703, NSF 60).

Attached is a UL (an ANSI Accredited Agency) certification attesting that our product meets current AWWA/NSF standards.

Please note our material is manufactured in the USA.

Key Chemical is a strong supplier to the water treatment industry. We look forward to being a reliable supplier bringing you quality products when you need them.

Best Regards,

A handwritten signature in black ink, appearing to read "Steven V. Norris", with a long horizontal flourish extending to the right.

Steven V. Norris
President

Certificate of Compliance

Certificate Number 20110118 – MH47618-25246
Report Reference MH47618, 2010 February 01
Issue Date 2011 January 18

Page 1 of 1



**Underwriters
Laboratories Inc.®**

Issued to: **KEY CHEMICAL INC**
9503 DOVEWOOD PL
WAXHAW, NC 28173 USA

*This is to certify that
representative samples of*

Drinking Water Treatment Chemicals

Model Descriptions: Hydrofluosilicic Acid 20-25% (Fluosilicic Acid).


*Have been investigated by Underwriters Laboratories Inc.® in accordance
with the Standard(s) indicated on this Certificate.*

Standard(s) for Safety: The basic standard used to investigate products in this category is ANSI/NSF 60-2009, "Drinking Water Treatment Chemicals - Health Effects."

Additional Information: Marking:
Bakersville, NC

<u>Product</u>	<u>Maximum Use Level, mg/L</u>
Hydrofluosilicic Acid 20-25%	6.0

Only those products bearing the UL Classification Mark should be considered as being covered by UL's Classification and Follow-Up Service.

The UL Classification Mark includes: UL in a circle symbol:  with the word "CLASSIFIED" (as shown); a control number (may be alphanumeric) assigned by UL; a statement to indicate the extent of UL's evaluation of the product; and, the product category name (product identity) as indicated in the appropriate UL Directory.

Look for the UL Classification Mark on the product

William R. Cramer
Director, North American Certification Programs



MATERIAL SAFETY DATA SHEET FLUOROSILICIC ACID

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Key Chemical, Inc
9503 Dovewood Place
Waxhaw, NC 28173

EMERGENCY TELEPHONE NUMBER:
Chemtel 800-255-3924

TRADE NAME:
Hydrofluorosilicic Acid
CHEMICAL NAME:
Fluorosilicic Acid

IDENTIFICATION NUMBER:
UN 1778
SYNONYMS:
Fluorosilicic Acid, HFS

2. INGREDIENTS

<u>Component</u>	<u>CAS #</u>	<u>Percent</u>	<u>ACGIH TLV</u>	<u>OSHA PEL</u>	<u>Units</u>
Water	7732-18-5	70-80	Not Est.	Not Est.	Not Est.
Fluorosilicic Acid	16961-83-1	20-30	2.5 (As F-)	2.5 (As F-)	mg/M ³
Hydrogen Fluoride	7664-39-3	0-1	3 (C)	3 6 (STEL)	ppm ppm

ACGIH TLVs are based on 1997 values. OSHA PELs are based on the more stringent 1987 values, which were subsequently vacated by the courts. All values are 8-hour time-weighted averages unless otherwise noted. (C) represents a ceiling exposure limit that should not be exceeded at any time. (STEL) represents Short Term Exposure Limit - normally 15 minutes.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Product is a clear liquid with a pungent, sour, penetrating odor. Liquid may cause severe irritation and chemical burns of the eyes, skin, mucous membranes, and respiratory tract. Development of hydrofluoric acid burns may take up to 12 hours after exposure. Wear appropriate personal protective equipment. Keep individuals not involved in the clean-up out of the area. Prevent spread of release by diking with earth, sand, or other non-reactive materials. Prevent entry into storm or sanitary sewers, ground water, or soil. Releases may be reportable to local, state, and/or federal authorities. Absorb releases material with a sorbent suitable for acidic materials or pump into appropriate containers for disposal. After clean up, slowly neutralize residual materials with a weakly basic media, preferably ground or powdered limestone. All materials collected during clean-up operations may be contaminated and should be treated as hazardous unless specific testing, including TCLP, shows the collected material to be non-hazardous.

4. HAZARDS IDENTIFICATION - Continued

POTENTIAL HEALTH EFFECTS:

Eye:	May cause severe irritation and chemical burns of the eyes. Burns may not become evident for up to 12 hours after exposure.
Skin Contact:	May cause severe irritation and chemical burns of the skin. Burns may not become evident for up to 12 hours after exposure.
Skin Absorption:	Not known to be absorbed through the intact skin.
Ingestion:	MAY BE FATAL IF LARGE AMOUNTS ARE INGESTED. May cause abdominal pain diarrhea, vomiting, excess salivation, and painful spasms of the limbs.
Inhalation:	May cause severe irritation and chemical burns of the nose, throat, mucous membranes and respiratory tract.

Chronic and Carcinogenicity: Prolonged exposure may cause dermatitis. The product has not been identified as a carcinogen or potential carcinogen. Pre-existing skin, lung, central nervous system, and kidney conditions may be aggravated by exposure to the components of the product. Exposure to fluorides at concentrations well above the TLV or PEL may cause a chronic bony fluorosis. See Section 11.

5. FIRST AID MEASURES

Inhalation:	Remove exposed person to fresh air. If breathing is difficult, oxygen may be administered. If breathing has stopped, artificial respiration should be started immediately. Seek medical attention.
Eyes:	Flush with tepid water for at least 20 minutes holding the eyelids wide open. Seek medical attention immediately.
Skin:	Wash thoroughly with mild soap and water. Seek medical attention immediately and advise medical personnel of possible hydrogen fluoride exposure. Remove any contaminated clothing and discard properly.
Ingestion:	SEEK MEDICAL ATTENTION IMMEDIATELY. Give water or milk to dilute. Do not induce vomiting unless directed by licensed medical personnel. Advise medical personnel of possible fluoride and hydrogen fluoride exposure. Never give anything by mouth to an unconscious individual.

6. FIRE FIGHTING MEASURES

Flash Point: NA LEL: NA UEL: NA Auto Ign. Temp.: NA

Product will not ignite. Material in or near fires should be cooled with a water spray or fog if compatible with fire fighting techniques for the other materials involved in the fire. A self-contained breathing apparatus operating in the positive pressure mode and full fire fighting gear should be worn for combating fires. Water used to fight fires should be contained. See Section 12.

7. ACCIDENTAL RELEASE MEASURES

Prevent spread of release by diking with earth, sand, or other non-reactive materials. Absorb releases with a sorbent suitable for acidic materials or pump into appropriate containers for disposal. After initial clean up, slowly neutralize the release area with a weakly basic media, preferably ground or powdered limestone. Appropriate personal protective equipment cited in Section 8 should be worn during all clean-up operations. All materials collected during clean-up operations may be contaminated and should be treated as hazardous unless specific testing, including TCLP, shows the collected material to be non-hazardous. Releases may be reportable to local, state, and/or federal authorities. See Sections 12 & 15.

7. HANDLING AND STORAGE

Do not store in metal containers or with or near incompatible materials cited in Section 10. Store in tightly closed containers out of contact with the elements and in a well-ventilated area. Appropriate personal protective equipment cited in Section 8 should be worn during handling. Good housekeeping and engineering practices should be employed to prevent spills of the product in the workplace. Any spills should be cleaned up as soon as possible to minimize the possibility of contact. See Section 6. Wash hands and face thoroughly before eating, drinking or smoking.

8. EXPOSURE CONTROL - PERSONAL PROTECTION

Engineering Controls: Local exhaust ventilation should be provided to maintain exposures below the limits cited in Section 2. Design details for local exhaust ventilation systems may be found in the latest edition of "Industrial Ventilation: A Manual of Recommended Practice" published by the ACGIH Committee on Industrial Ventilation, P.O. Box 16153, Lansing, MI, 48910. The need for local exhaust ventilation should be evaluated by a professional industrial hygienist. Local exhaust ventilation systems should be designed by a professional engineer.

Respiratory Protection: If exposures may exceed the limits cited in Section 2, use, as a minimum, a NIOSH approved 1/2 face-piece respirator with cartridges approved for acid gases, hydrogen fluoride. If exposures exceed 10 times the limits cited in Section 2, consult your respiratory protection equipment supplier or a professional industrial hygienist for selection of the proper equipment. The evaluation of the need for respiratory protection should be made by a professional industrial hygienist.

Eye Protection: Chemical protective goggles are recommended where there is the possibility of eye contact with the product. Safety glasses with side-shields are recommended for all other operations.

Protective Gloves: Polymeric gloves are recommended to prevent possible chemical burns. Butyl rubber is recommended.

General: A butyl coated apron or other body covering is recommended where regular work clothing may become contaminated with the product. All soiled or dirty clothing and personal protective equipment should be thoroughly cleaned before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND PHYSICAL STATE: Clear to Yellow Liquid with Pungent Odor	EVAPORATION RATE (BUTYL ACETATE = 1): NA
VAPOR DENSITY (AIR =1): N/A	FREEZE POINT: 4° F
pH: 1.5 - 2 (1-10% concentration)	BOILING POINT: 225° F
SPECIFIC GRAVITY/BULK DENSITY: 1.21 (water = 1)	% Volatile: NA
% SOLUBILITY (H₂O): 100%	Bulk Density: 9.7-10.2 lb. /gallon at 20-25% sol. @75°

10. STABILITY AND REACTIVITY

Stability & Polymerization: Product is stable. Hazardous polymerization will not occur.

Incompatibility (Conditions to Avoid): Do not store in metal or glass containers, with or near strong acids, reducing agents, organics, glass, concrete, leather, natural rubber, or metals. Fluorosilicic acid can react with many metals to liberate hydrogen gas which is highly flammable. May react with strong mineral acids to liberate hydrogen fluoride or hydrofluoric acid which are highly toxic and corrosive.

Hazardous Decomposition Products: Toxic and corrosive fluoride gases.

Special Sensitivity: None that are known.

11. TOXICOLOGICAL INFORMATION

The acute lethal oral toxicity in rats for fluorosilicic acid is approximately 35 mg per kilogram of body weight. Based on the fluorosilicic acid content, this is equivalent to approximately 9 grams for the average human. Hydrofluoric acid burns from dilute solutions may not become evident for up to 12 hours after exposure. They are characterized by intense pain and burning at the site of contact. Appropriate medical treatment to neutralize the causative agent is the only way to alleviate the pain and burning. Chronic bony fluorosis is a very rare condition and is not expected to develop if exposures are maintained below mandated or recommended exposure limits.

12. ECOLOGICAL INFORMATION

Fluorides can be highly toxic to aquatic and terrestrial flora and fauna. Care should be taken to prevent the product from entering the environment.

13. DISPOSAL CONSIDERATIONS

Product is defined as a Corrosive Hazardous Waste (D002). It should be disposed of in accordance with all applicable local, state, and/or federal regulations. If used or waste product is disposed of, testing, including TCLP, should be conducted to determine hazard characteristics. Empty containers will contain product residues. Do not use for any purpose other than to store product.

14. TRANSPORTATION INFORMATION

DOT Shipping Description:	Fluorosilicic Acid, 8, UN 1778, PGII
Label:	Corrosive
DOT ERG Number:	154
Restrictions:	Passenger Aircraft = 1L; Cargo Only Aircraft = 30 L

15. REGULATORY INFORMATION

The hydrogen fluoride component of the product is reportable under Section 313 of the Superfund Amendments and Reauthorization Act of 1986.

OSHA Hazard Communication Categories: Irritant, Lung Hazard, Skin Hazard, Kidney Hazard

SARA Hazard Categories: Acute Hazard, Chronic Hazard

The Reportable Quantity (RQ) for releases of hydrogen fluoride to the environment is 100 pounds.

Hydrogen fluoride has been listed as a Special Health Hazard Substance by the State of New Jersey.

All components of the product are included in the Toxic Substances Control Act (TSCA) inventory.

16. OTHER INFORMATION

Not Est. = Not Established; NA = Not Applicable; ND = Not Determined

Preparation /Revision Date: 07/02/2013

Reason for Revision: Review information and convert to ANSI Z400.1 format

